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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,769	10/24/2003	Cyril Cabral JR.	FIS920030263US1	2768
32074	7590	11/24/2004	EXAMINER	
INTERNATIONAL BUSINESS MACHINES CORPORATION			NGO, NGAN V	
DEPT. 18G			ART UNIT	
BLDG. 300-482			PAPER NUMBER	
2070 ROUTE 52			2814	
HOPEWELL JUNCTION, NY 12533			DATE MAILED: 11/24/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,769

Applicant(s)

CABRAL ET AL.

Examiner

Ngan Ngo

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-23, 25-27 and 41-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 49-55 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-23, 25-27 and 41-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The amendment filed September 27, 2004 has been entered and made of record as paper no. 0904.

New claims 41-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 41, "lateral extension contact said portions" is vague and indefinite; "gate said portions" is not understood; "said lateral extension contact portions" has no antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 10-12, 14, 16-19, 22, 23, 25, and 27 stand rejected under 35 U.S.C. 102(b) as being anticipated by Havemann et al.

Havemann discloses field effect transistor comprising a device channel (20), a gate (18), a source/drain extension (24 or 26), and low resistance material layer(30, 32, and 34) formed on the gate and on the source/drain extension in which the portions on each source/drain extension provide direct contact with source/drain extension and are

lateral extension contact portions. The gate is figure 4 of Havemann is clearly separated for the lateral extension contact portions. Note line 55 of column 6 of Havemann that the extension has a lateral thickness of approximately 100 angstroms. Note that "approximately 100 angstroms" can be less than 100Å.

In re claim 5, line 11, column 4 of Havemann discloses that the gate electrode is made of polysilicon.

Claims 6-9, 15, 20, 21, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havemann in view of Pfiester and Hokazono et al.

Havemann discloses all the subject matter discussed above. Pfiester further discloses that the field effect transistors are p-type FET and n-type FET. Hokazono further disclose that the semiconductor substrate can be silicon on insulator substrate. Since all of the references above teach the field effect transistor having silicide layer, it would have been obvious to one of ordinary skill in the art to use the teachings of the references above to form the claimed device.

Claims 49-55 are allowed.

Applicant's arguments filed September 27, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument in the last paragraph of pages 9 and 10 that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "LDD bulk FET technology", "sidewalls are 300Å", "intermediate implants", "device is annealed to diffuse dopant", lightly doped unsilicided region") are not recited in the rejected claim(s). Although the claims are

interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to the first full paragraph of page 10, Havemann et al clearly disclose all the subject matter that Applicants argue about (i.e, "portions on each said source/drain extension providing direct contact with said source/drain extension" and 'silicide portions on the gate are "separated from said lateral extension contact portions.""). The rest of pages 10, 11, and 12 of the arguments have nothing to do with what was claimed. Applicants only discussed what was in the specification. Limitations from the specification are not read into the claims as discussed above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Examiner Ngan Ngo at telephone number (571) 272-1711. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ngan Van Ngo', followed by a checkmark and another signature.

Ngan Van Ngo
Primary Examiner

Ngan Ngo

November 18, 2004